

ENGLISH

PS-900

Heavy-weight material kit

INSTRUCTION MANUAL



CAUTION :

This Instruction Manual describes the heavy-weight material kit. When you want to use your sewing machine with this product attached, refer to the “Safety precautions” in the Instruction Manual for your sewing machine carefully until you fully understand the included precautions in prior.

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1. About heavy-weight material kit (40270717)

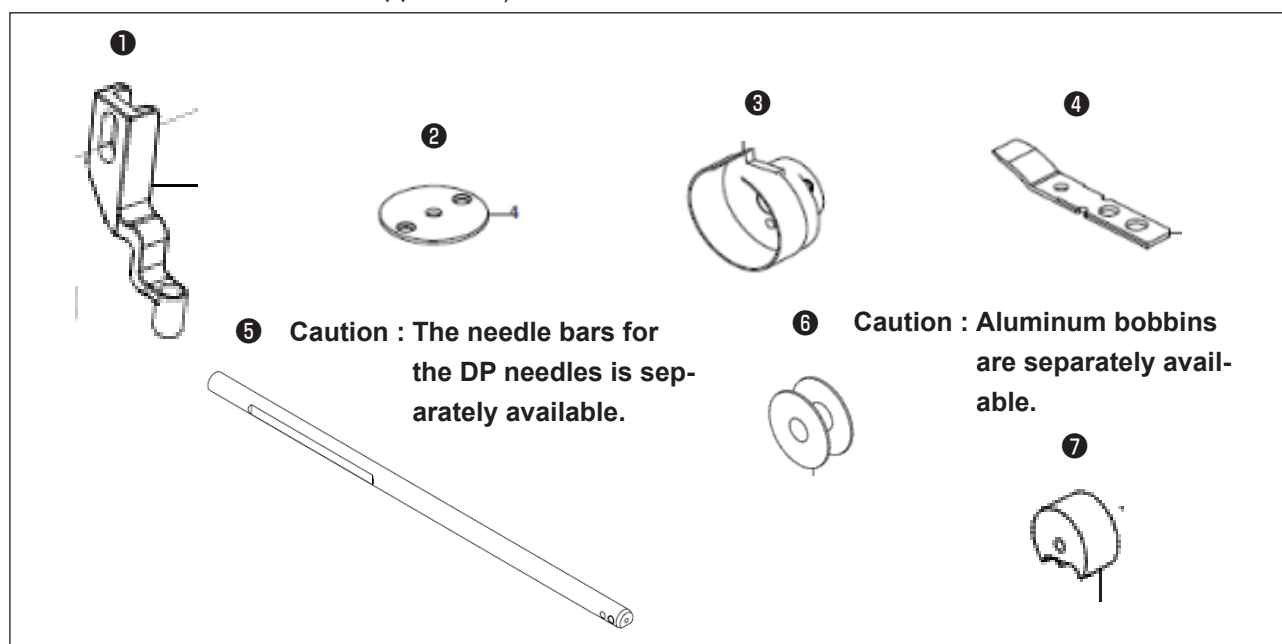
No	Gauge	S type	H type		
①	Intermediate presser	40228073 (Φ2.2)	40228075 (Φ3.5)	Compatible with the PS-800	*
②	Throat plate	40225486 (with φ1.6 boss)	40225499 (without φ3.0 boss)	Compatible with the PS-800	*
③	Hook	40225488	40234079	Compatible with the PS-800	*
④	Counter knife	40225492	40234080	Compatible with the PS-800	*
⑤	Needle bar	Standard equipment (φ1.64)	40266167 (Φ2.0)	The standard needle bar can support needles up to DB×1 #18. For thicker needles, the needle bar has to be changed accordingly.	★
⑥	Bobbin	Resin (40268785)	Aluminum (40225494)	In the case the bobbin for thick thread is used to prevent idling	★
⑦	Bobbin case	S type (40268784)	H type (40225489)	In the case the bobbin for thick thread is used to prevent idling	★

* : Heavy-weight material kit (40270717)

★ : Parts ⑤ , ⑥ and ⑦ should be arranged as needed.

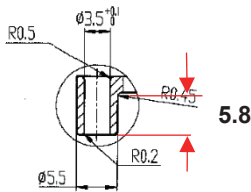
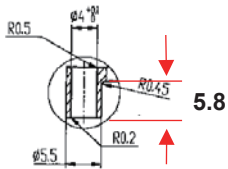
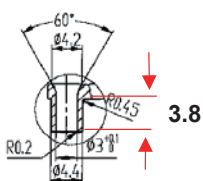
The needle installed at the time of shipment is DBx1. DBx1 #8 to #18 needles can be used for the sewing machine in the shipped state.

If you want to use a needle that is thicker than the needle with the needle count of #18 for the H type sewing machine, etc., separately arrange the DPx5 needle bar. (The needle bar supports DP×5 needles. DP×17 needles are not applicable.)



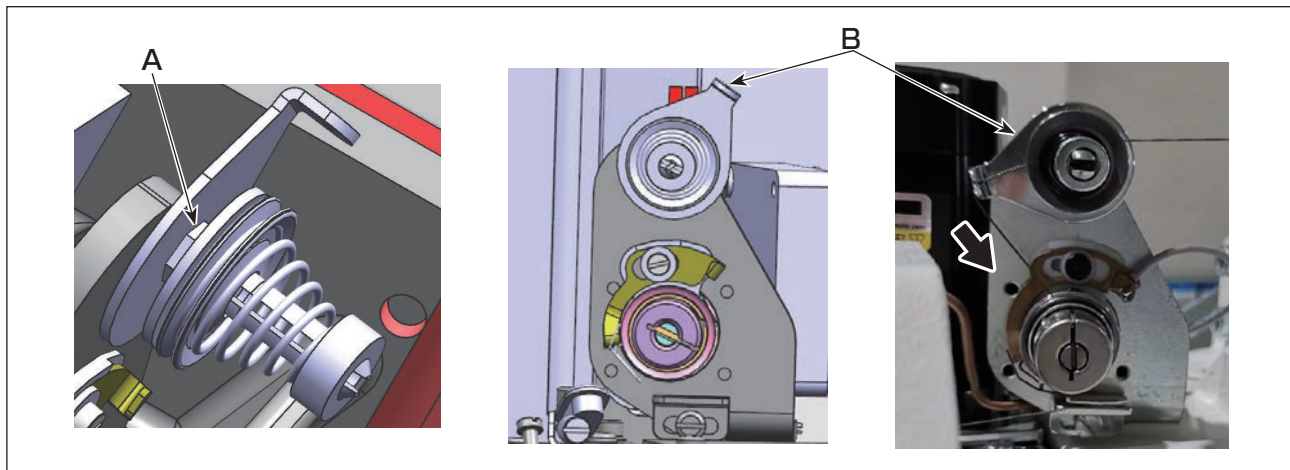
After you have replaced the standard kit with the heavy-weight material kit, change the settings to achieve the below-stated recommended sewing speeds for the H type.

Stitch pitch and the sewing speed			
Number	Stitch pitch	Sewing speed	Remarks
1	3.5 mm	1,800 sti/min	
2	4.0 mm	1,600 sti/min	
3	4.5 mm	1,400 sti/min	
4	5.0 mm	1,200 sti/min	

	Parts number	Shape	Application
Intermediate presser D=3.5	40228075		Provided as standard for the H type at the time of shipment Leather goods, bags, air bags, bullet-proof clothing
Intermediate presser D=4.0	40228076		Leather goods, bags, military related items
Intermediate presser D=3.0	40228077		Leather goods, bags, air bags, bullet-proof clothing

2. Parts reassembling procedure from the S type to the H type

2-1. Adjusting the orientation of the active tension (AT) thread tension guide



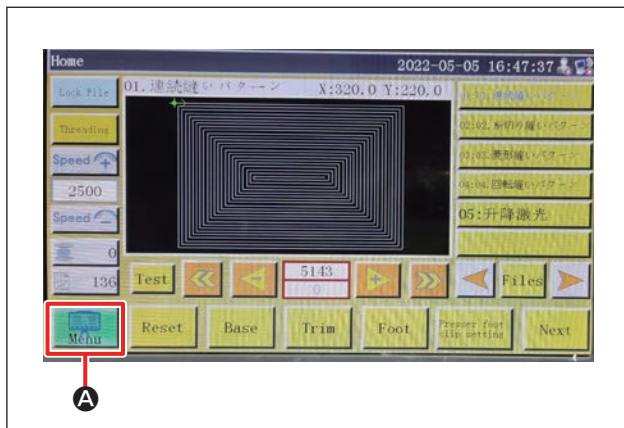
Loosen shaft **A** with a spanner. Adjust the orientation of guide **B** to the direction as shown in the figure given above. Then, tighten shaft **A**.



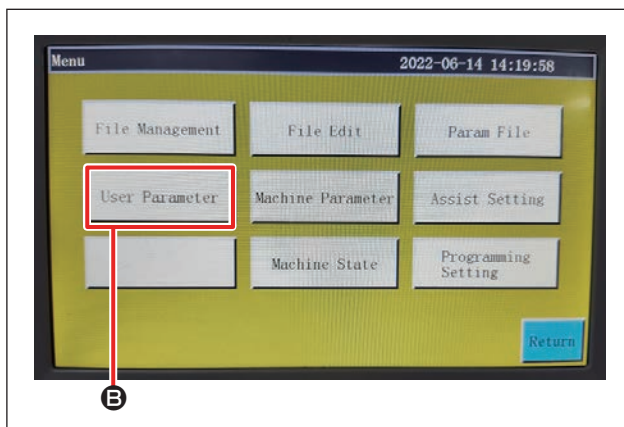
For the H type, the active tension (AT) provides a higher thread tension to cause the thread to slip off the tension disk.

In order to help prevent the thread from coming off the tension disk, the orientation of the guide should be changed. Tilt the guide in the direction of the arrow as the needle thread tension increases.

2-2. Setting of the parameters



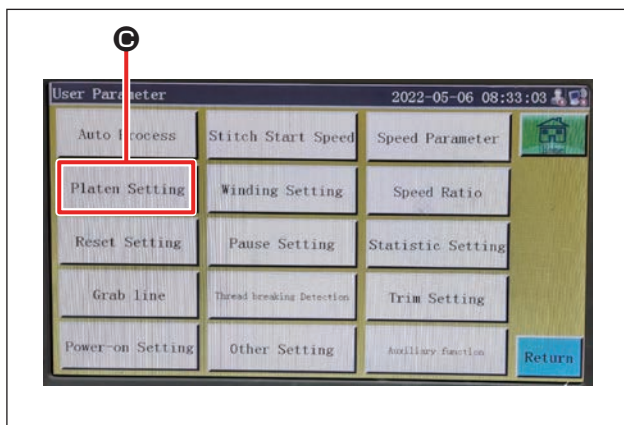
1) Press button **A**.



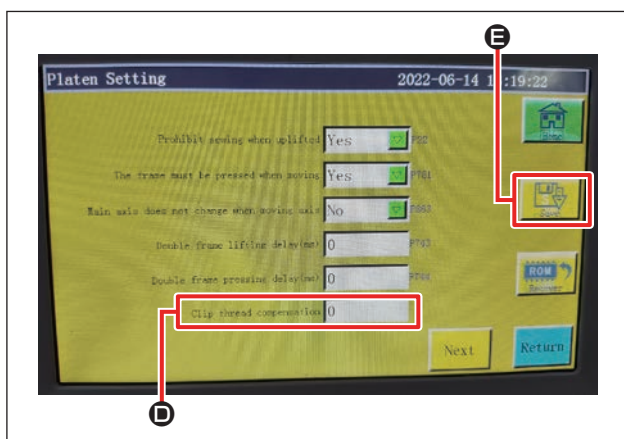
2) Press button **B**.

In the default state, the password that has been factory-prepared at the time of delivery is provided.

The factory-provided password is "11111111".

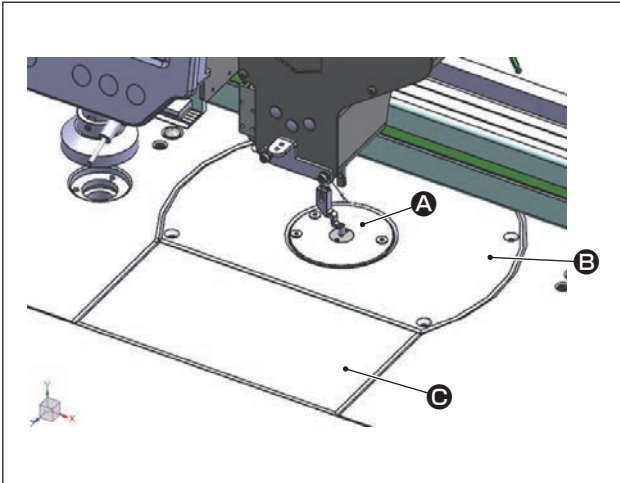


3) Press button **C**.

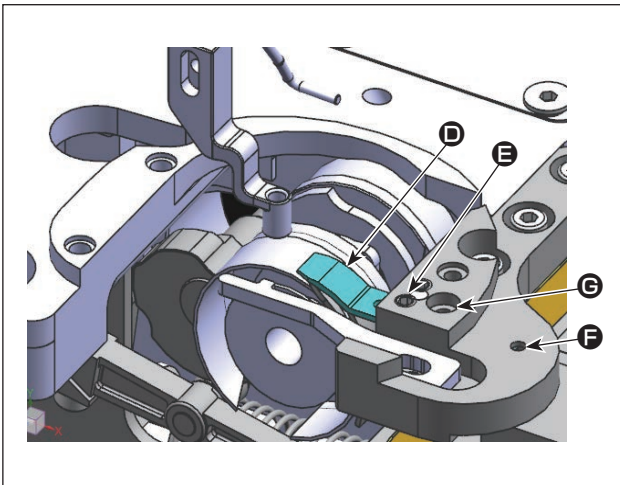


4) For the heavy-weight materials type, set correction value **D** to "0 (zero)". Then, press button **E**.

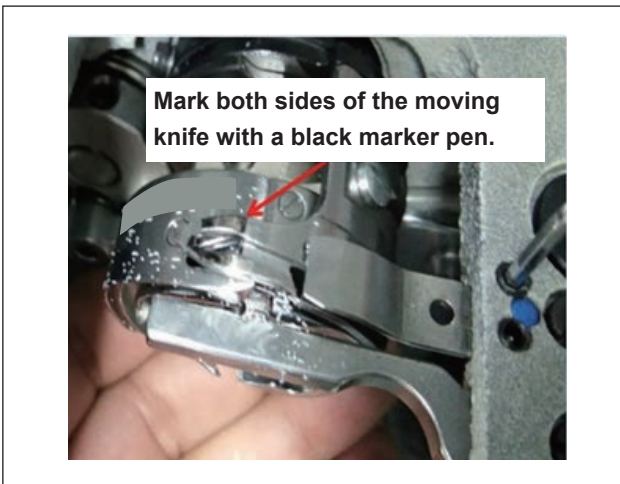
2-3. Replacing the counter knife



- 1) Remove throat plate **A**, middle cover **B** and front cover **C**.



- 2) Loosen screw **E**. Change counter knife **D** with H type counter knife **4**. Insert a 2.5 mm hexagonal wrench key into hole **F** at the rear part of the counter knife, and turn it in the tightening direction to secure the counter knife while preventing misalignment.

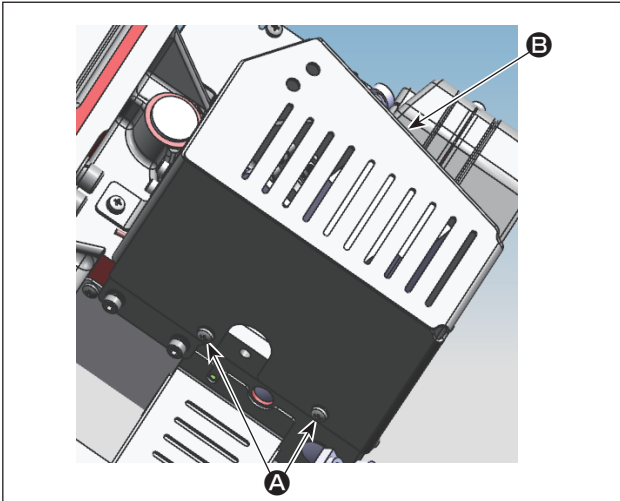


- 3) Mark the 5-mm position of the moving knife blade with a black marker pen. Adjust the counter knife pressure with counter knife pressure adjustment screw **E**. After the completion of the aforementioned adjustment, face down the moving knife and re-adjust the moving knife pressure repeatedly until both sides of the black marker on the moving knife blade are rubbed by the counter knife at the same time. In addition, try to adjust so that; the less the friction force between the moving knife and the counter knife is decreased, the better thread trimming result can be obtained.

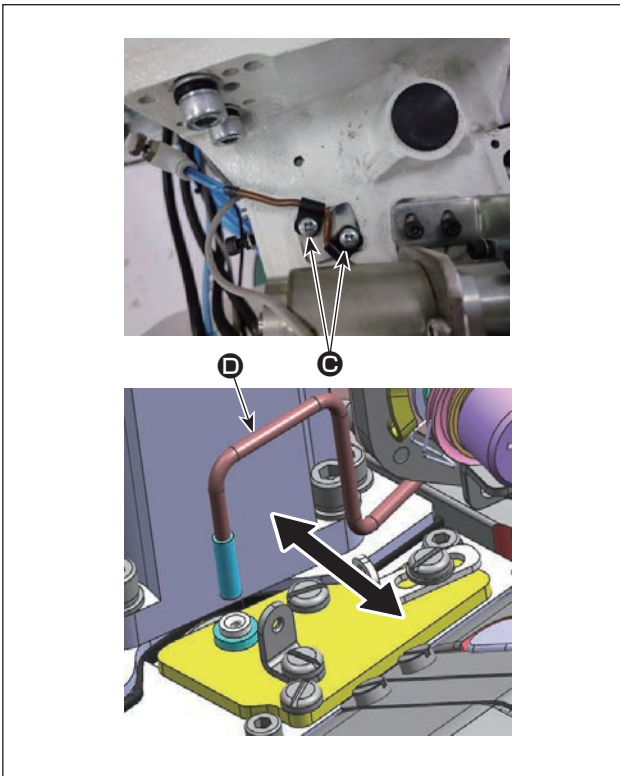


1. After reconfiguration, check that the needle is in the center of the needle hole.
2. After reconfiguration, check that there is no problem with the hook oil.
3. Before sewing, run the sewing machine idle and check that there are no problems such as abnormal noise or interference.

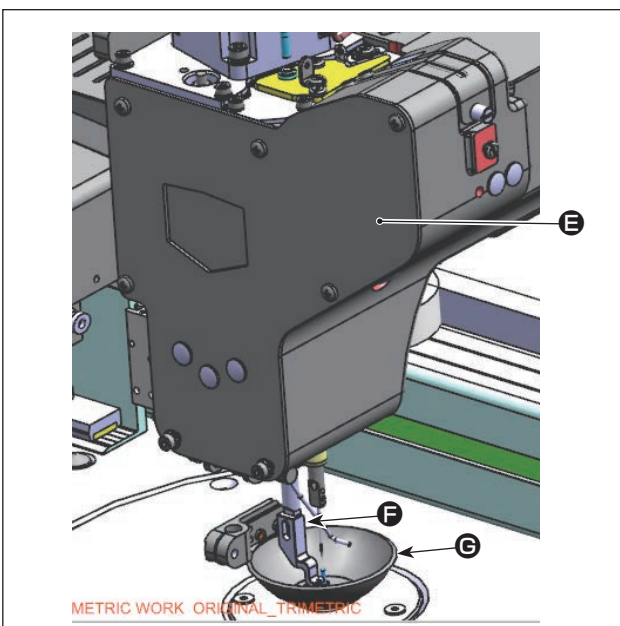
2-4. Replacing the needle bar



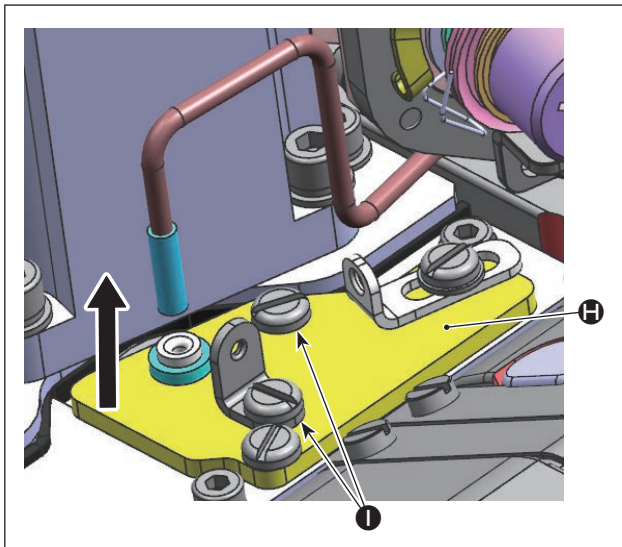
- 1) Loosen screws **A** to remove machine head cover **B**.



- 2) Loosen assembly screws **C** of the tube to allow tube **D** to be moved to the right and left.



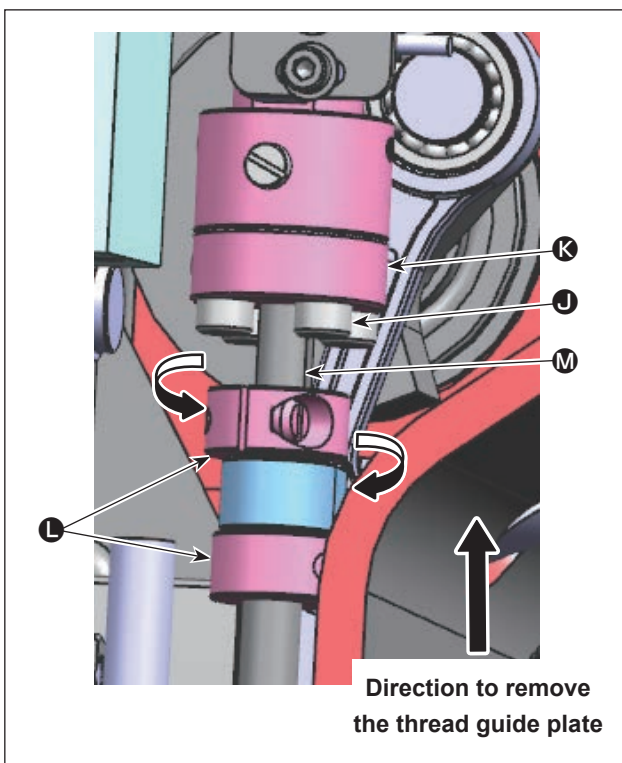
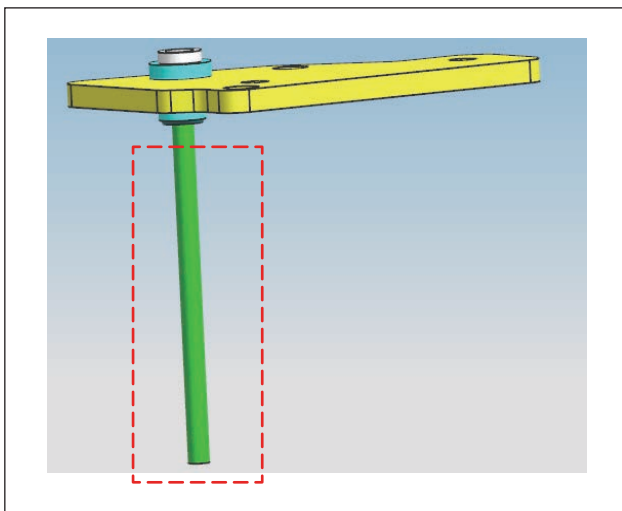
- 3) Remove frame cover **E**, intermediate presser **F** and disk presser **G**.



- 4) Loosen screws **I** and take out thread guide plate **H** of the head rotation section straight.

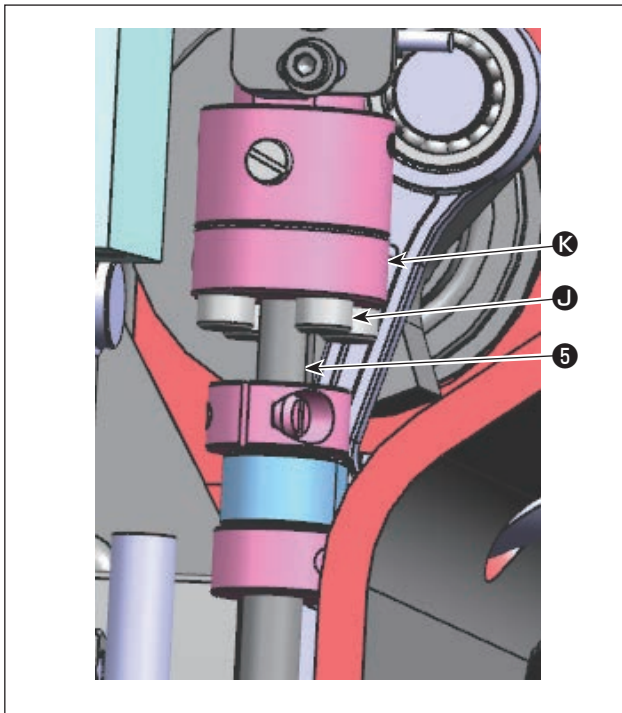


Thread guide plate **H** has a long thread guide under it, so be careful not to allow the thread guide to hit against the surrounding parts to protect against breakage.

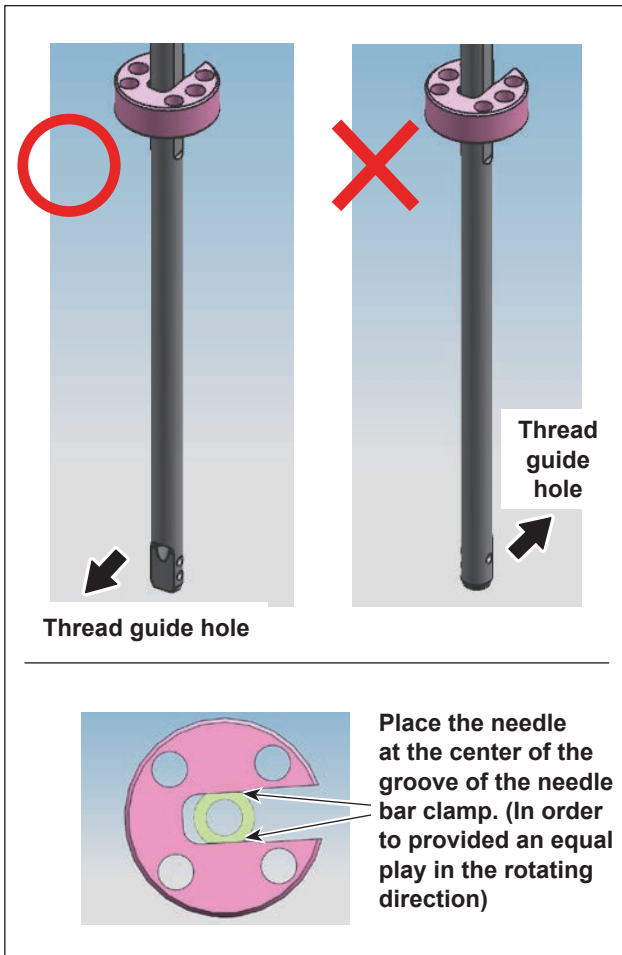


- 5) Turn the power ON and reset the sewing machine.

Under the adjustment mode, operate the operation panel to turn the needle bar. Loosen screws **J** (at four locations) and remove needle bar rotation stopper **K**. Then, loosen needle bar brackets **L** (at two locations each at the top and bottom) to take out needle bar **M** from below.

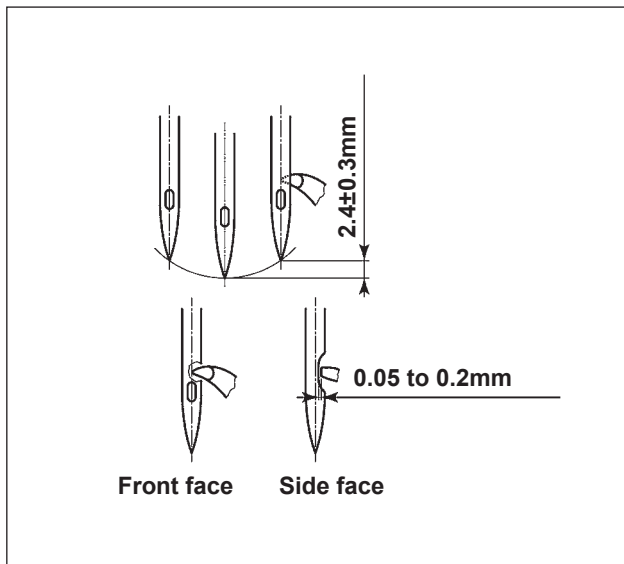


6) Insert H type needle bar 5 from above.



6) Assemble needle bar clamp K and screws J so that an equal play is provided between needle bar 5 and needle bar clamp K.

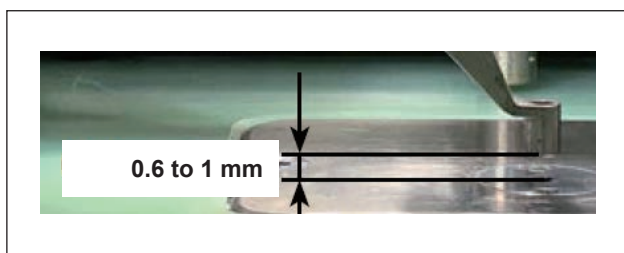
Caution Carefully check the orientation of the thread guide hole.



- 8) Replace the standard hook with H type hook ③ . Adjust the lower dead point of the needle bar with the S type jig.

Lift the needle bar from its lower dead point by $2.4 \pm 0.3 \text{ mm}$. In this state, adjust the needle bar height and the hook position.

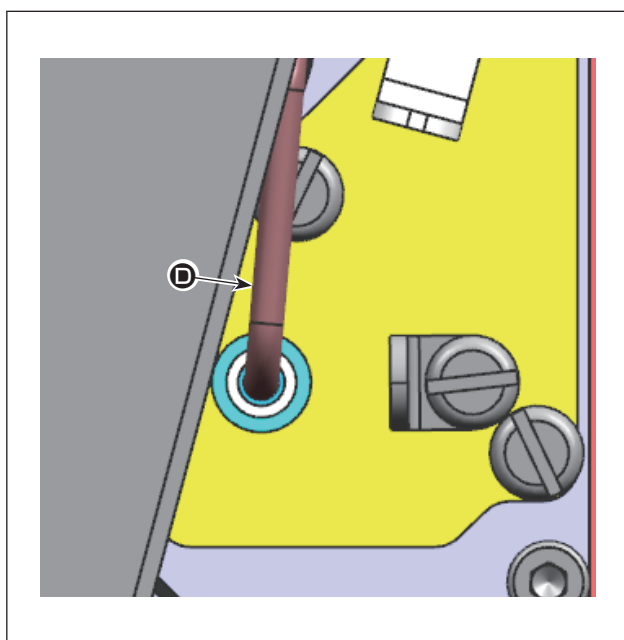
When observing from the side face of the sewing machine, the clearance provided between the blade point of hook and the scarf of needle 0.05 to 0.2mm.



- 9) Install intermediate presser ① .

Adjust the intermediate presser so that a clearance of 0.6 to 1 mm is provided between the bottom of the intermediate presser and the throat plate when the intermediate presser is brought to its lowest point.

- 10) Install the remaining parts following the steps of procedure 4) to 1) in the written order.



- 11) After the completion of installation of the parts, check the threading air blow.